UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

In The Matter Of:	
MEW Study Area	
Fairchild Semiconductor Corporation Schlumberger Technology Corporation National Semiconductor Corporation NEC Electronics, Inc. Siltec Corporation Sobrato Development Companies General Instrument Corporation Tracor X-Ray, Inc. Union Carbide Chemicals and Plastics Company Inc.	U.S. EPA Docket No. 91-4
Respondents	
Proceeding under Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, (42 U.S.C. § 9606(a))	

ADMINISTRATIVE ORDER

FOR REMEDIAL DESIGN AND REMEDIAL ACTION

I. INTRODUCTION AND JURISDICTION

A. This Order is issued to Respondents by the United States Environmental Protection Agency ("EPA") under the authority vested in the President of the United States by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986 ("CERCLA"), 42 U.S.C. § 9601 et seq. This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580 (52 Fed. Reg. 2926, January 29, 1987), and was further delegated to EPA Regional Administrators on September 13, 1987, by EPA Delegation No. 14-14-B. On October 26, 1988, this authority was re-delegated to the Director of the Hazardous Waste Management Division, EPA Region IX, by Order R1290.43.

B. The Director of the Hazardous Waste Management Division, EPA Region IX, has determined that there may be an imminent and substantial endangerment to the public health, welfare, or the environment because of the release and threatened release of hazardous substances at or from the Middlefield-Ellis-Whisman Study Area ("MEW Site" or "Site") in Mountain View, California. The MEW Site includes: (i) three National Priorities List ("NPL") sites — Fairchild, proposed for inclusion on the NPL, Raytheon, and Intel — as well as several non-NPL sites and properties; (ii) areas of soil and groundwater contamination in the vicinity of Middlefield Road, Ellis Street, and Whisman Road, and any areas to which such groundwater contamination has migrated; (iii) the Silva Well Area (Santa Clara Valley Water District Well Number 22A3) on Sherland Avenue in Mountain View; and (iv) groundwater contamination extending north of the Bayshore Freeway (U.S. Highway 101) that is beneath the United States Naval Air Station, Moffett Field ("Moffett NAS") and the National Aeronautics and Space Administration's Ames Research Center ("NASA Ames").

C. This Order directs Respondents to undertake actions that EPA has determined to be necessary to protect the public health, welfare, and the environment from the potential imminent and substantial endangerment at the MEW Site.

D. This Order applies to the following persons, each of which is a "Respondent":

1. Fairchild Semiconductor Corporation, a Delaware corporation
   2900 Semiconductor Drive M/S 15-160
   Santa Clara, CA 95051
   Service Agent:
   CT Corporation System
   818 West 7th Street, Suite 1004
   Los Angeles, CA 90017

2. Schlumberger Technology Corporation, a Texas corporation
   1853 Knoll Drive
   Ventura, CA 93003
   Service Agent:
   CT Corporation System
   818 West 7th Street, Suite 1004
   Los Angeles, CA 90017

3. National Semiconductor Corporation, a Delaware corporation
   2900 Semiconductor Drive M/S 15-160
   Santa Clara, CA 95052
   Service Agent:
   CT Corporation System
   818 West 7th Street, Suite 1004
   Los Angeles, CA 90017

4. NEC Electronics, Inc., a California corporation
   Shigeo Kirimoto
   401 Ellis Street
   Mountain View, CA 94039
   Service Agent:
   Shigeo Kirimoto
   401 Ellis Street
   Mountain View, CA 94039

5. Siltec Corporation, a California corporation
   Stanley T. Myers
   c/o Siltec Corp.
   190 Independence Drive
   Menlo Park, CA 94025
   Service Agent:
   Stanley T. Myers
   c/o Siltec Corp.
   190 Independence Drive
   Menlo Park, CA 94025

6. Sobrato Development Companies, a California limited partnership
   20700 Valley Green Drive
   Cupertino, CA 95014
   Service Agent:
   John A. Sobrato
   20700 Valley Green Drive
   Cupertino, CA 95014

7. General Instrument Corporation, a Delaware corporation
   800 South Figueroa Street
   Los Angeles, CA 90017
   Service Agent:
   CT Corporation System
   818 West 7th Street, Suite 1004
   Los Angeles, CA 90017

8. Tracor X-Ray, Inc., a California corporation
   345 East Middlefield Road
   Mountain View, CA 94042
   Service Agent:
   CT Corporation System
   818 West 7th Street, Suite 1004
   Los Angeles, CA 90017

9. Union Carbide Chemicals and Plastics Company Inc., a New York corporation
   100 Oceangate
   Long Beach, CA 90802
   Service Agent:
   CT Corporation System
   818 West 7th Street, Suite 1004
   Los Angeles, CA 90017

II. FINDINGS OF FACT

A. Description and Characterization of the MEW Site.

The MEW Site encompasses approximately eight square miles of mostly industrial property located just south of the San Francisco Bay, in the city of Mountain View, California. The center, or focus, of the Site is an industrial park bounded by Middlefield Road, Ellis Street, and Whisman Road. Also included on the Site are two federal facilities: the United States Naval Air Station, Moffett Field, and the National Aeronautics and Space Administration's Ames Research Center. The primary environmental threat related to the MEW Site is a large plume of groundwater contamination emanating from several dozen facilities that have operated in the MEW area. Most of these facilities have a long history associated with the manufacture of semiconductors and industrial cleaning activities. Such operations involved extensive use of solvents and other chemical considered to be hazardous substances. These chemicals were commonly piped and stored in underground tanks, pipelines, and sumps at the MEW Site. Beginning in the early 1980's, it was discovered that several facilities at the MEW Site had been releasing hazardous substances into the soil and groundwater. The releases were linked to leaks from underground tanks, lines, and sumps, as well as from poor above-ground chemical handling practices and storage techniques.

The following list includes the locations of the primary facilities within the MEW Site where contamination has been detected. Trichloroethene was used as the primary indicator chemical for the purpose of determining the extent of groundwater contamination in the investigations conducted at the MEW Site. Therefore, the discussion of contamination at each facility focuses primarily on the presence of trichloroethene. This

listing of facilities, chemicals, and releases of hazardous substances is not meant to be exhaustive and does not constitute a limitation of the liability of any potentially responsible party.

1. Fairchild Semiconductor Corporation (formerly Fairchild Camera and Instrument Corporation and hereafter referred to as "Fairchild"), Schlumberger Technology Corporation ("STC"), and National Semiconductor Corporation ("NSC"). Respondent Fairchild was a semiconductor manufacturer and handled a variety of chemicals at its facilities within the MEW Site, including dichlorobenzene ("DCB"), Freon, phenol, tetrachloroethene ("PCE"), trichloroethane ("TCA"), and trichloroethene ("TCE"), as well as other organic solvents, acids, gases, and inorganics. In 1979, Respondent STC became the successor in interest to Fairchild Camera and Instrument Corporation, which subsequently changed its name to Fairchild Semiconductor Corporation in 1985. In 1987, Respondent NSC became the successor in interest to Fairchild when Respondent NSC purchased Fairchild from Respondent STC. Because Respondents STC and NSC have been successors in interest to property at the MEW Site that was or is now, owned or operated by Respondent Fairchild, Respondents STC's and NSC's connection to the MEW Site will be addressed along with Respondent Fairchild's.

a. 369 North Whisman Road. From 1969 to 1987, Respondent Fairchild was the owner of the facility located at 369 North Whisman Road, and was the operator of that facility from 1969 to the mid-1980's. Since 1987, Respondent STC has owned this facility. The facility was used for the processing of silicon metal into electronic semiconductor devices. The facility either includes or formerly included the following: Fairchild building 19, underground waste solvent storage tanks, a chemical storage tank, acid neutralization sumps, neutralization tanks, a waste hydrofluoric acid tank, a waste solvent recovery tank, and a pH neutralization system, as well as other units. DCB, Freon,

phenol, TCA, and TCE were among the numerous hazardous substances known to have been present at this facility. Samples of the soil taken in the vicinity of this facility indicate concentrations of TCE as high as 7,400 parts per billion ("ppb"). Samples of the groundwater taken in the vicinity of this facility indicate concentrations of TCE as high as 37,000 ppb. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills.

b. 441 North Whisman Road. From 1969 until 1987, Respondent Fairchild was the owner and operator of the facility located at 441 North Whisman Road, and was a lessee of part of the facility after 1987. Since 1987, Respondent STC has owned this facility. The facility was used for the processing of silicon metal into electronic semiconductor devices. The facility either includes or formerly included the following: Fairchild buildings 13 and 23, a pH neutralization system, an isopropanol tank, as well as other units. Various acids were among the many hazardous substances known to have been present at this facility. Samples of the soil taken in the vicinity of this facility indicate concentrations of TCE as high as 2,500 ppb. Samples of the groundwater taken in the vicinity of this facility indicate concentrations of TCE as high as 7,800 ppb. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills.

c. 515 North Whisman Road, 545 North Whisman Road, and 313 Fairchild Drive. From the early 1960's to 1989, Respondent Fairchild was the builder and operator of the contiguous facilities located at 515 North Whisman Road, 545 North Whisman Road, and 313 Fairchild Drive. These facilities were part of Respondent Fairchild's Linear Division and housed its chemical mixing and silicon wafer manufacturing operations. In 1987, Respondent STC succeeded to the leases of the Fairchild buildings at this location, then sublet the buildings back to Respondent Fairchild

until 1989 when Respondent Fairchild's sublease expired. Although the buildings at this location are currently vacant, Respondent STC continues to lease these buildings from the current owners. These facilities either include or formerly included the following: Fairchild buildings 1, 2, 3, and 4, a spill containment sump, slurry collection sumps, a slurry sample box, a solvent separation sump, an acid collection sump, hydrofluoric acid storage tanks, a pH neutralization system, pH neutralization sumps, a waste water neutralization sump, and an industrial waste water treatment system, as well as other units. Freon, PCE, TCA, and TCE were among the numerous hazardous substances known to have been present at these facilities. Samples of the soil taken in the vicinity of these facilities indicate concentrations of TCE as high as 1,700 ppb. Samples of the groundwater taken in the vicinity of these facilities indicate concentrations of TCE as high as 5,000 ppb. The contamination at these facilities has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills.

d. 464 Ellis Street. From 1968 to 1987, Respondent Fairchild was the owner of the facility located at 464 Ellis Street and was the operator at that facility from 1968 to the mid-1980's. Since 1987, Respondent STC has owned this facility. The facility was used for silicon wafer fabrication. The facility either includes or formerly included the following: Fairchild building 20, pH neutralization systems, as well as other units. Freon, PCE, TCA, and TCE were among the numerous hazardous substances known to have been present at this facility. Samples of the soil taken in the vicinity of this facility indicate concentrations of TCE as high as 30 ppb. Samples of the groundwater taken in the vicinity of this facility indicate concentrations of TCE as high as 9,500 ppb. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills.

e. 401 National Avenue. From 1966 to 1987, Respondent Fairchild was the owner and operator of the facility located at 401 National Avenue. In 1987, Respondent STC succeeded to ownership of this facility and leased it back to Respondent Fairchild. Respondent STC continues to own the property although Respondent Fairchild's lease has expired. The facility was used for the receipt, mixing, and delivery of chemicals. The facility either includes or formerly included the following: Fairchild building 9, solvent storage tanks, a spill collection sump, a pH neutralization system, as well as other units. TCA and TCE were among the numerous hazardous substances known to have been present at this facility. Samples of the soil taken in the vicinity of this facility indicate concentrations of TCE as high as 11,000 ppb. Samples of the groundwater taken in the vicinity of this facility indicate concentrations of TCE as high as 6,800 ppb. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills. In May 1978, two waste spills were reported, one of which caused a fish kill in a nearby stream.

f. 644 National Avenue. From 1966 until 1984, Respondent Fairchild was an owner and operator of the facility located at 644 National Avenue. Respondent Fairchild used this facility for electroplating operations. At the time that Fairchild owned and operated the facility, the facility included Fairchild building 18, a pH neutralization system, as well as other units. Freon, TCA, and TCE were among the numerous hazardous substances known to have been present at this facility during the time of Respondent Fairchild's ownership and operating history. Samples of the groundwater taken in the vicinity of this facility indicate concentrations of TCE as high as 26,000 ppb of TCE. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills.

2. NEC Electronics, Inc. ("NEC"). Respondent NEC, or its predecessor Electronic Arrays (which became a division of NEC between 1981 and 1984), was involved in the manufacturing of silicon wafers and through its operation handled a variety of chemicals at its facilities within the MEW Site, including Freon, phenol, TCA, and TCE, as well as other organic solvents, acids, gases, and inorganics.

a. 550 East Middlefield Road. From 1973 to the present, Respondent NEC, or its predecessor Electronic Arrays, has operated the facility located at 550 East Middlefield Road. During that time, hazardous substances were disposed of at the facility. The facility either includes or formerly included the following: solvent and hazardous materials storage areas, as well as other units. TCA was among the hazardous substances known to have been present at this facility. Samples of the groundwater taken in the vicinity of this facility indicate concentrations of TCA as high as 100 ppb. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills.

b. 475 Ellis Street. Respondent NEC is the current operator of the facility located at 475 Ellis Street. The facility includes a chemical storage area and loading dock. NEC was known to use the chemical phenol at its other nearby facilities and samples of the soil taken in the vicinity of this facility indicate concentrations of phenol as high as 5,000 ppb. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills.

c. 501 Ellis Street. Respondent NEC, or its predecessor Electronic Arrays, is now, and has been since 1968, the operator of the facility located at 501 Ellis Street. Respondent NEC used this facility for silicon wafer fabrication. The facility either includes or formerly included the following: an acid neutralization tank sump, an

underground waste solvent tank, Burmar and hydrofluoric acid waste lines, as well as other units. Freon, TCA, and phenol were among the numerous hazardous substances known to have been present at this facility during the time of Respondent NEC's operating history. Samples of the soil taken in the vicinity of this facility indicate concentrations of Freon as high as 690 ppb. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills. In 1983, a leak was discovered in the Burmar waste line.

3. General Instrument Corporation ("GIC"). Respondent GIC was involved in crystal growing and polishing for silicon wafer manufacturing and handled a variety of chemicals at its facility within the MEW Site, including TCE, as well as other organic solvents, acids, gases, and inorganics.

a. 405 National Avenue. From March 1968 to April 1978, Respondent GIC, through its Semi-Metals Division, was the owner and operator of the facility located at 405 National Avenue. During that time, Respondent GIC used the facility for the manufacturing of silicon wafers. The facility either includes or formerly included the following: an above-ground waste TCE tank, an acid neutralization system, a silicon sludge clarifier, seven underground storage tanks, as well as other units. TCE was among the hazardous substances known to have been present at this facility. Samples of the soil taken in the vicinity of this facility indicate concentrations of TCE as high as 720 ppb. Samples of the groundwater taken in the vicinity of this facility indicate concentrations of TCE as high as 47,000 ppb. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills. Between the years of 1969 and 1976, there probably was a release from a deteriorating sewer line.

4. Siltec Corporation ("Siltec"). Respondent Siltec manufactured silicon wafers and handled a variety of chemicals at its facility within the MEW Site.

a. 405 National Avenue. Respondent Siltec is now, and has been since 1978, the owner and operator of the facility located at 405 National Avenue. Siltec used this facility to manufacture silicon wafers. The facility either includes or formerly included the following: an above-ground waste TCE tank, an acid neutralization system, a silicon sludge clarifier, seven underground storage tanks, as well as other units. TCE was among the hazardous substances known to have been present at this facility. Samples of the soil taken in the vicinity of this facility indicate concentrations of of TCE as high as 720 ppb. Samples of the groundwater taken in the vicinity of this facility indicate concentrations of TCE as high as 47,000 ppb. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills. Between the years of 1969 and 1976, there probably was a release from a deteriorating sewer line .

5. Sobrato Development Companies ("Sobrato"). Respondent Sobrato owns several facilities within the MEW Site. Tenants occupying these facilities have been known to handle a variety of chemicals at these facilities, including chloroform, dichloroethane ("DCA"), Freon, TCA, TCE, as well as other organic solvents, acids, gases, and inorganics.

a. 455 East Middlefield Road. Respondent Sobrato is now, and has been since 1972, the owner of the facility located at 455 East Middlefield Road. The facility either includes or formerly included the following: a research and development laboratory, a neutralization system, a trench drain system, a tank farm area, an underground piping system, an underground solvent tank, as well as other units. Former

tenants at this facility were known to have used TCE, chloroform, and DCA. Samples of the soil taken in the vicinity of this facility indicate concentrations of TCE as high as 810 ppb. Samples of the groundwater taken in the vicinity of this facility indicate concentrations of TCE as high as 840 ppb. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills.

b. 485/487 and 501/505 East Middlefield Road. Respondent Sobrato is now, and has been since 1972, the owner of the facilities located at 485/487 and 501/505 East Middlefield Road. The facilities either include or formerly included the following: a chemical storage area, as well as other units. Former tenants at this facility were known to have used DCA, Freon, TCA, and TCE. Samples of the soil taken in the vicinity of these facilities indicate concentrations of TCE as high as 810 ppb of TCE. Samples of the groundwater taken in the vicinity of these facilities indicate concentrations of TCE as high as 1,800 ppb. The contamination at these facilities has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills.

c. 575 East Middlefield Road. Respondent Sobrato is now, and has been since 1972, the owner of the facility located at 575 East Middlefield Road. The facility either includes or formerly included the following: a chemical storage area, as well as other units. Former tenants at this facility were known to use Freon 113. Samples of the soil taken in the vicinity of this facility indicate concentrations of TCE as high as 3,200 ppb. Samples of the groundwater taken in the vicinity of this facility indicate concentrations of TCE as high as 720 ppb. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills.

6. Tracor X-Ray, Inc. ("Tracor"). Respondent Tracor manufactures and sells X-ray Fluorescence systems and X-ray spectrometers and handled a variety of chemicals at its facility within the MEW Site, including TCA, TCE, as well as other organic solvents, acids, gases, and inorganics.

a. 345 East Middlefield Road. From June 1, 1981 to the present, Respondent Tracor was the operator and lessee of the facility located at 345 East Middlefield Road. Respondent Tracor used this facility to manufacture X-ray Fluorescence systems and X-ray spectrometers. TCA and TCE were among the hazardous substances known to have been used at this facility since 1981. Samples of the groundwater taken in the vicinity of this facility indicate concentrations of TCE as high as 1,000 ppb. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills.

7. Union Carbide Chemicals and Plastics Company Inc. (formerly, Union Carbide Corporation; "Union Carbide"). Respondent Union Carbide manufactured semiconductors and electronic products, and handled a variety of chemicals at its facilities within the MEW Site, including TCE, as well as other organic solvents, acids, gases, and inorganics.

a. 415 East Middlefield Road and a vacant lot between 365 and 415 East Middlefield Road. From March 1966 to August 1969, Respondent Union Carbide was the operator and lessee of the facility located at 415 East Middlefield Road and the lessee of a vacant lot between 365 and 415 East Middlefield Road. Union Carbide used this facility to manufacture semi-conductor electronic products. At the time Union Carbide occupied these facilities, the facilities included: a below-grade double containerized acid

neutralization vault and associated piping which connected the vault to the building at 415 East Middlefield Road, a chemical storage area, as well as other units. DCB, Freon, TCA, and TCE were among the numerous hazardous substances known to have been present at these facilities. Samples of the soil taken in the vicinity of these facilities indicate concentrations of TCE as high as 460 ppb. Samples of the groundwater taken in the vicinity of these facilities indicate concentrations of TCE as high as 120 ppb. The contamination at these facilities has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills.

b. 365 East Middlefield Road. From June 1964 to June 1969, Respondent Union Carbide was the operator and lessee of the facility located at 365 East Middlefield Road. Union Carbide used this facility to manufacture discrete semi-conductor chips. During the time that Union Carbide occupied this facility, the facility included an underground vault containing a waste solvent tank and an acid waste neutralization tank. TCE was among the numerous hazardous substances known to have been present at this facility. Samples of the soil taken in the vicinity of this facility indicate concentrations of TCE as high as 21,000 ppb. Samples of the groundwater taken in the vicinity of this facility indicate concentrations of TCE as high as 49,000 ppb. The contamination at this facility has resulted from one or more of the following: leaking underground tanks, pipelines, or sumps, and/or from surface spills.

B. Site Investigations and Enforcement History.

1. During 1981 and 1982, several owners and occupants of facilities within the area bounded by Middlefield Road, Ellis Street, and Whisman Road conducted preliminary investigations at and around their facilities. These investigations found significant concentrations of hazardous substances in both the soil and the groundwater.

2. In 1984, EPA proposed to list three areas, located within the MEW Site, on the NPL. These areas are known as the Fairchild, Raytheon, and Intel sites. Both the Raytheon and the Intel sites are now listed as separate sites on the NPL; the Fairchild site is proposed for inclusion on the NPL. The NPL, codified at 40 CFR Part 300, Appendix B, is promulgated pursuant to Section 105(b) of CERCLA, 42 U.S.C. § 9605(b).

3. On or about September 1988 and on or about March 1989, EPA sent General Notice Letters to Respondents Fairchild, NEC, Siltec, Sobrato, GIC, Tracor, and Union Carbide, as well as fifteen other potentially responsible parties.

4. In 1985, under the direction of the California Regional Water Quality Control Board - San Francisco Bay Region ("RWQCB"), five companies [Intel Corporation ("Intel"), Raytheon Company ("Raytheon"), and Respondents Fairchild, NEC, and Siltec] initiated a joint investigation to document and characterize the distribution of chemicals emanating from their facilities.

5. On August 15, 1985, Raytheon, Intel, and Respondent Fairchild entered into an Administrative Order on Consent (Docket No. 85-03) with EPA, RWQCB, and the California Department of Health Services ("DHS"). The Administrative Consent Order required Raytheon, Intel, and Respondent Fairchild to conduct a Remedial Investigation ("RI") and a Feasibility Study ("FS") at the MEW Site, pursuant to both CERCLA and the National Contingency Plan ("NCP"), 40 CFR Part 300. Although involved in the initial RI/FS negotiations, Respondents NEC and Siltec declined to enter into the Administrative Consent Order.

6. The RI was concluded in July 1988. The RI documented: (i) that significant and serious contamination originated from facilities within the MEW Site, and (ii) that this contamination affected both the soil and the groundwater at the MEW Site.

7. On or about November 1988 and pursuant to Section 117 of CERCLA, 42 U.S.C. § 9617, EPA submitted the FS and the Proposed Plan for remedial action to the public for comment.

8. In May 1989, Special Notice Letters were sent out to selected potentially responsible parties, in accordance with Section 122 of CERCLA, 42 U.S.C. § 9622.

9. On June 9, 1989, EPA signed the Record of Decision ("ROD") for the MEW Site. The remedy selected in the ROD provides for, in part, the following: (i) soil remediation by in-situ vapor extraction with treatment by vapor phase granular activated carbon, and excavation with treatment by aeration; (ii) groundwater remediation by extraction with treatment by air stripping towers, with additional treatment by granular activated carbon for the emissions from these towers if required by either EPA or the Bay Area Air Quality Management District to meet air emissions policies and standards; (iii) reuse of all extracted groundwater to the maximum extent feasible; (iv) identification, evaluation, and sealing of conduits or potential conduits of contamination; (v) maintenance of inward and upward hydraulic gradients, by pumping and treating, inside established slurry walls; (vi) further characterization and subsequent extraction and treatment of groundwater contamination in the vicinity of the Silva Well; and (vii) regular operation, maintenance, and monitoring of all systems and media (i.e. groundwater, soils, and air), including established slurry walls. The ROD is attached to this Order as Attachment 1 and is incorporated herein by reference. The ROD is supported by an administrative record that contains the documents and information upon which EPA based the selection of the

response action. The administrative record was made available to the public, in accordance with Section 113 of CERCLA, 42 U.S.C. § 9613, and the NCP.

10. On September 21, 1990, EPA issued an Explanation of Significant Differences ("ESD") which clarifies the June 9, 1989 ROD with regard to the cleanup levels to be achieved for both the soil and groundwater contamination at the MEW Site. Previously, the ROD had set forth cleanup "goals"; now, the ESD clarifies that the ROD selected these cleanup "goals" as final cleanup standards. Thus, the soil cleanup standards are 500 ppb of TCE for all soils outside of slurry walls already in place, and 1,000 ppb of TCE inside the slurry walls. The groundwater cleanup standards are 5 ppb of TCE for the shallow aquifers (including groundwater inside the slurry walls), and 0.8 ppb of TCE for the "C" and deep aquifers. The ESD is attached to this Order as Attachment 2 and is incorporated herein by reference.

11. Two potentially responsible parties — Intel and Raytheon — have agreed to implement a portion of the remedy selected in the ROD pursuant to the terms of a potential consent decree. Under the terms of the potential consent decree, Intel and Raytheon will perform and finance a fixed percentage of all the work required to implement the regional remedial action set forth in the ROD, as clarified by the ESD. The potential consent decree was entered into with the United States in accordance with Section 122 of CERCLA, 42 U.S.C. § 9622.

C. Endangerment to Human Health and the Environment.

1. Investigations at the MEW Site have revealed the presence of over 70 chemical compounds in the groundwater, surface water, sediments, and subsurface soils. EPA chose to select a subset of 15 chemicals of primary concern in order to focus on those

contaminants that were thought most likely to pose risks to human health, welfare, and the environment. Of these 15 chemicals of primary concern, TCE is the predominant chemical found at the MEW Site and was selected as the indicator chemical to monitor the extent of soil and groundwater contamination at the MEW Site. The selected chemicals of primary concern and their health effects are listed below:

a. Chloroform. Chloroform has been reported to cause an increase in kidney epithelial tumors in rats and hepatocellular tumors in mice. Evidence from human epidemiological studies suggests that exposure to chloroform in water supplies may be associated with increased incidences of bladder, colon, and rectal tumors. Acute exposure to high concentrations of chloroform in humans may result in death caused by ventricular fibrillation. Chronic exposure to lower concentrations may lead to hepatic, renal, and cardiac effects, and central nervous system depression. EPA has classified chloroform as a probable human carcinogen. EPA has established a drinking water Maximum Contaminant Level ("MCL") of 100 ppb for total trihalomethanes (chloroform is one of the four trihalomethanes included in this regulation).

b. Dichlorobenzene ("DCB"). DCB has been reported to cause central nervous system depression, blood dyscrasias, and lung, kidney, and liver damage from acute and chronic exposure.

c. Dichloroethane ("DCA"). DCA has been reported to cause cardiac arrhythmias and central nervous system depression in humans from exposure to high levels.

d. Dichloroethene ("DCE"). DCE has been reported to significantly increase the incidence of kidney tumors in male mice. DCE is mutagenic and has caused adverse reproductive effects in rats and rabbits. Chronic exposure to DCE causes liver damage, and acute exposure to high doses produces nervous system damage. EPA has classified DCE as a possible human carcinogen. EPA has established a drinking water MCL of 7 ppb and the State of California has established a State MCL of 6 ppb for 1,1 - DCE.

e. Freon - 113. Freon 113 has been shown to cause central nervous system effects at high doses.

f. Phenol. Phenol has been observed to cause central nervous system depression, cardiac arrest, and death in humans and animals from acute exposure to high levels. Phenol has been observed to promote skin tumor development following initiation by other carcinogens.

g. Tetrachloroethene ("PCE"). PCE has been observed to result in an increased incidence of hepatocellular carcinoma in mice. Toxic effects in humans and animals from both acute and chronic exposure to PCE include central nervous system depression, and liver and kidney damage. EPA has classified PCE as a probable human carcinogen.

h. Trichloroethane ("TCA"). TCA has been associated with central nervous system depression and cardiovascular effects, including premature ventricular contractions and arrhythmias from exposure to high levels. EPA has established a drinking water MCL of 200 ppb for 1,1,1 - TCA.

i. Trichloroethene ("TCE"). TCE is a central nervous system depressant following acute or chronic exposure. Industrial use of TCE may also result in dermatitis from exposure to vapors of concentrated solvent. In mice, an increased incidence of hepatocellular carcinomas was reported following oral administration of TCE. EPA has classified TCE as a probable human carcinogen. EPA has established a drinking water MCL of 5 ppb for TCE.

j. Vinyl chloride. Vinyl chloride is a transformation product of TCE and PCE. It has been implicated in brain , lung, and hemolymphopoietic cancers in humans. Chronic inhalation and ingestion of vinyl chloride has been shown to induce cancer in the liver and other tissues in rats and mice. Vinyl chloride is also mutagenic. Short-term exposure of workers to vinyl chloride produces symptoms including dizziness, headaches, and narcosis. Long-term exposure is associated with hepatotoxicity, central nervous system, and cardiovascular and gastrointestinal disturbances. EPA has classified vinyl chloride as a known human carcinogen. EPA has established a drinking water MCL of 2 ppb for vinyl chloride and the State of California has established a State MCL of 0.5 ppb for vinyl chloride.

k. Antimony. Antimony has been shown to lead to serious myocardial damage resulting in cardiovascular dysfunction from chronic ingestion or inhalation exposure. In addition, chronic inhalation may also lead to deleterious respiratory effects.

l. Cadmium. Cadmium caused an increase incidence of lung tumors in mice exposed via inhalation and has been associated with an increase incidence of cancer in occupationally exposed workers. EPA has classified cadmium as a probable human carcinogen. EPA has established a drinking water MCL of 10 ppb for cadmium.

m. Arsenic. Arsenic is associated with an increase incidence of lung, liver, bladder, and skin cancer in individuals exposed via drinking water. EPA has classified arsenic as a human carcinogen. EPA has established a drinking water MCL of 50 ppb for arsenic.

n. Lead. Lead has been shown to cause adverse neurological effects in humans, and especially in young children and fetuses, even at relatively low exposure levels. EPA has classified lead as a probable human carcinogen. EPA has established a drinking water MCL of 50 ppb for lead.

2. There is or has been a release or threat of release of hazardous substances from all the Respondents' facilities into the soil and the groundwater at the MEW Site. Hazardous substances have commingled and/or migrated at the MEW Site to form an area of contaminated groundwater known as the MEW Plume, which extends from the southern end of the MEW Site to a large part of Moffett NAS and NASA Ames.

3. The MEW Plume presents an imminent and substantial endangerment to the City of Mountain View's current drinking water supply, as well as all water supplies (e.g., shallow aquifers). People may be exposed to contaminated groundwater at or from the MEW Plume through ingestion, bathing, cooking, dermal contact, and other domestic uses of water.

4. Chemicals originating from each Respondent's facility and migrating via the groundwater and surface run-off from the MEW Site pose a threat or a potential threat to the ecosystems encompassing the San Francisco Bay and adjacent wetlands.

III. CONCLUSIONS OF LAW AND DETERMINATIONS

A. Each Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

B. The MEW Site, and each facility described under the list of addresses above, is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

C. Each Respondent is a "liable party" as defined in Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and each Respondent is subject to this Order under Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

D. The numerous chemical substances found at the MEW Site, including the substances listed under Section II.C.1 above, are "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

E. These hazardous substances have been and continue to be released from and within the MEW Site into the soil, groundwater, and surface water.

F. The past and present migration of hazardous substances from and within the MEW Site constitutes a "release" as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

G. The potential for future migration of hazardous substances from and within the MEW Site poses a threat of a "release" as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

H. Based on the Findings of Fact and Conclusions of Law, the Director of the Hazardous Waste Management Division, EPA Region IX, hereby determines that the release and threat of release of one or more hazardous substances and pollutants or contaminants from and within the MEW Site may present an imminent and substantial endangerment to the public health, welfare, or the environment.

I. In order to prevent or mitigate a significant risk of harm to human health and the environment, remedial action must be taken to prevent the migration of or exposure to contamination at and/or emanating from the MEW Site.

J. The remedial measures required by this Order are necessary to protect the public health, welfare, and the environment, and are consistent with CERCLA and the NCP, 40 CFR Part 300.

IV. NOTICE TO THE STATE

Prior to issuing this Order, EPA notified the California DHS and the California RWQCB - San Francisco Bay Region of its intent to issue this Order.

V. ORDER

Based on the foregoing, Respondents are hereby ordered to comply with the following provisions, including but not limited to all attachments to this Order, all documents incorporated by reference into this Order, and all schedules and deadlines in this Order, attached to this Order, or incorporated by reference into this Order:

VI. DEFINITIONS

A. Unless otherwise expressly provided in this Order, terms used in this Order which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in the statute or its implementing regulations. Whenever terms listed below are used in this Order or in the documents attached to this Order or incorporated by reference into this Order, the following definitions shall apply:

1. "ARARs" shall mean applicable or relevant and appropriate requirements pursuant to Section 121(d) of CERCLA, 42 U.S.C. § 9621(d), and as further defined in the National Contingency Plan, 40 CFR Part 300.

2. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. § 9601 et seq.

3. "Contractor" shall mean the individual, company, or companies retained by or on behalf of Respondents, or by each Respondent, to undertake and complete the Work.

4. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the end of the next working day.

5. "EPA" shall mean the United States Environmental Protection Agency.

6. "Explanation of Significant Differences" or "ESD" shall mean the document signed by the Regional Administrator of EPA Region IX on September 21, 1990, which clarifies the June 9, 1989 Record of Decision signed by the Regional Administrator on June 9, 1989, and which is attached hereto as Attachment 2.

7. "Facility Coordinator" shall have the meaning given to it in Section XVIII (Remedial Project Manager and Coordinators) below.

8. "Facility Specific Work" shall have the meaning given to it in Section IX.D (Facility Specific Work) below.

9. "Joint Work" shall have the meaning given to it in Section IX.C (Joint Work) below.

10. "MEW Plume" shall mean groundwater containing detectable concentrations of the following chemicals that is beneath the surface of the MEW Site and the areas surrounding the MEW Site:

Chloroform	1,1,1 - Trichloroethane
1,2 - Dichlorobenzene	Trichloroethene
1,1 - Dichloroethane	Vinyl Chloride
1,1 - Dichloroethene	Antimony
1,2 - Dichloroethene	Cadmium
Freon - 113	Arsenic
Phenol	Lead
Tetrachloroethene	

11. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of

CERCLA, 42 U.S.C. § 9605, codified at 40 CFR Part 300, including any amendments thereto.

12. "Performance Standards" shall mean those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations, identified in the ROD, the ESD, the applicable guidances, and Section IX (Work To Be Performed) below, that the Work required by this Order must attain and maintain.

13. "Project Coordinator" shall have the meaning given to it in Section XVIII (Remedial Project Manager and Coordinators) below.

14. "QA/QC" shall mean quality assurance and quality control.

15. "Record of Decision" or "ROD" shall mean the document signed by the Regional Administrator of EPA Region IX on June 9, 1989, which describes the Remedial Action to be conducted at the MEW Site, as clarified by the ESD signed by the Regional Administrator on September 21, 1990. The ROD is attached hereto as Attachment 1.

16. "Regional Groundwater Remediation Program" or "RGRP" shall have the meaning given to it in Section IX.C (Joint Work) below.

17. "Remedial Action" or "RA" shall mean the implementation, in accordance with Section IX (Work To Be Performed) hereof, of the remedy set forth in the Record of Decision, including any additional activities required by this Order and any schedules or plans required to be submitted thereto.

18. "Remedial Design" or "RD" shall mean those activities to be undertaken by Respondents, or each Respondent in the case of Facility Specific Work, to develop the final plans and specifications for the Remedial Action pursuant to the Remedial Design Work Plan.

19. "Remedial Project Manager" or "RPM" shall have the meaning given to it in Section XVIII (Remedial Project Manager and Coordinators) below.

20. "Respondents" shall mean those parties listed as such in Section I.D of this Order.

21. "Site" or "MEW Site" or "MEW" shall mean the Middlefield-Ellis-Whisman Study Area in Mountain View, California, which includes: (i) three National Priorities List ("NPL") sites — Fairchild, proposed for inclusion on the NPL, Raytheon, and Intel — as well as several non-NPL sites and properties; (ii) areas of soil and groundwater contamination in the vicinity of Middlefield Road, Ellis Street, and Whisman Road, and any areas to which such groundwater contamination has migrated; (iii) the Silva Well Area (Santa Clara Valley Water District Well Number 22A3) on Sherland Avenue in Mountain View; and (iv) groundwater contamination extending north of the Bayshore Freeway (U.S. Highway 101) that is beneath the United States Naval Air Station, Moffett Field ("Moffett NAS") and the National Aeronautics and Space Administration's Ames Research Center ("NASA Ames"). The definition includes the MEW Plume.

22. "State" shall mean the State of California.

23. "Work" shall mean all activities that Respondents, collectively and individually, are required to perform under this Order, and any schedules or plans required to be submitted and approved pursuant thereto.

VII. NOTICE OF INTENT TO COMPLY

On the effective date of this Order, each Respondent shall provide oral notice, followed by written notice, to the Director of the Hazardous Waste Management Division, EPA Region IX, stating whether or not Respondent intends to comply with the terms of this Order. If a Respondent does not unequivocally commit to perform the Work as provided by this Order or fails to timely notify EPA of Respondent's intent to comply with this Order, such Respondent shall be deemed to have violated this Order and to have failed and refused to comply with this Order. Each Respondent's written notice shall describe, using facts that exist on or prior to the effective date of this Order, any "sufficient cause" defenses asserted by Respondent under Sections 106(b) and 107(c)(3) of CERCLA, 42 U.S.C. §§ 9606(b) and 9607(c)(3). The absence of a response by EPA to the notice required by this paragraph shall not be deemed to be acceptance of or agreement with any of the Respondent's assertions.

VIII. PARTIES BOUND

A. This Order shall apply to and be binding upon each Respondent listed as such in Section I.D of this Order, and each Respondent's respective officers, directors, agents, employees, contractors, successors, and assigns. Respondents are jointly and severally responsible for carrying out all of the Work required by this Order, except that each Respondent is responsible for its own Facility Specific Work as provided in Section IX

(Work To Be Performed) below. No change in the ownership, corporate status, or other control of any Respondent shall alter the responsibilities under this Order.

B. Each Respondent shall provide a copy of this Order to any prospective owner or successor before a controlling interest in its assets, property rights, or stock is transferred to the prospective owner or successor. Respondents shall provide a copy of this Order to each contractor, sub-contractor, laboratory, or consultant retained to perform any Work under this Order, within five (5) days after the effective date of this Order or on the date such services are retained, whichever date occurs later. Each Respondent shall also provide a copy of this Order to each person representing Respondent with respect to the Site or the Work to be performed and shall condition all contracts and sub-contracts entered into hereunder upon performance of the Work to be performed in conformity with the terms of this Order. With regard to the activities undertaken pursuant to this Order, each contractor and sub-contractor shall be deemed to be related by contract to the Respondents within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3). Notwithstanding the terms of any contract, Respondents are responsible for compliance with this Order and for ensuring that their contractors, sub-contractors, and agents comply with this Order, and perform any Work in accordance with this Order.

C. Within ten (10) days after the effective date of this Order, each Respondent that owns real property at the Site shall (i) record a copy or copies of this Order in the appropriate governmental office where land ownership and transfer records are filed or recorded, (ii) record a notice of obligation to provide access and related covenants, and (iii) ensure that the recording of this Order is indexed to the titles of each and every parcel at the Site so as to provide notice to third parties of the issuance and terms of this Order with respect to those properties. Such Respondents shall, within fifteen (15) days after the effective date of this Order, send notice of such recording and indexing to EPA.

D. Not later than fifteen (15) days prior to any transfer by or to a Respondent of any real property interest in any property included within the Site, the applicable Respondent(s) shall submit a true and correct copy of its transfer document(s) to EPA, and shall identify the transferor or transferee by name, principal business address, and effective date of the transfer.

IX. WORK TO BE PERFORMED

A. General Obligations.

1. Respondents shall jointly and severally finance and perform, at their expense, the Joint Work as required by this Order and the Attachments hereto. The obligations of Respondents to finance and perform the Facility Specific Work shall be joint and several to the extent provided by applicable law.

a. In the event of the insolvency or other failure of any one or more of the Respondents to perform any portion of the Joint Work, any remaining Respondent or Respondents shall complete all such requirements. In addition, EPA reserves the right to finance and perform such Work or to bring an enforcement action against the applicable Respondents for failing to perform the Joint Work required to be performed pursuant to this Order.

b. In the event of the insolvency or other failure of any Respondent to perform its Facility Specific Work, any other Respondent may perform such Facility Specific Work, subject to EPA approval. In addition, EPA reserves the right to finance and perform such Work, to require other Respondents to perform such Work in accordance

with Section XII (Additional Response Actions), or to bring an enforcement action against the applicable Respondents for failing to perform the Facility Specific Work required to be performed pursuant to this Order.

2. Respondents, and each Respondent in the case of Facility Specific Work, shall design, implement, and complete the Work in accordance with the NCP, and all amendments thereto, and in accordance with the standards, specifications, and schedules of completion set forth in or approved by EPA pursuant to this Section IX (Work To Be Performed). Respondents, and each Respondent, shall ensure that:

a. all designs, workplans, and proposals submitted pursuant to this Order are consistent with the NCP, U.S. EPA Guidance on Remedial Design and Remedial Action, OSWER Directive 9355.04A (June 1986), and all other appropriate EPA guidances;

b. all sampling plans are consistent with U.S. EPA Region IX Preparation of a U.S. EPA Region IX Sample Plan for EPA-Lead Superfund Projects (April 1989) 9QA-05-89 and Preparation of a U.S. EPA Region IX Field Sampling Plan for Private and State-Lead Superfund Projects (April 1990) 9QA-06-89;

c. all worker health and safety plans satisfy the requirements of (i) Part 1910 of Title 29 of the Code of Federal Regulations (54 Fed. Reg. 9294, March 6, 1989), (ii) U.S. Department of Health and Human Services Occupational Safety and Health Guidance for Hazardous Waste Site Activities (October 1985 DHHS (NIOSH) Publication No. 85-115), and (iii) U.S. EPA Standard Operating Safety Guides (July 1988); and

d. all quality assurance/quality control ("QA/QC") plans follow guidelines listed in Section XVI (Quality Assurance).

3. Unless otherwise directed by EPA, no Respondents shall perform any Work under this Section IX (Work To Be Performed) prior to EPA's approval of such Work.

4. All designs, workplans, and proposals required by this Order shall include proposals for schedules and quality assurance provisions.

5. The Work performed by Respondents, and each Respondent in the case of Facility Specific Work, pursuant to this Order shall, at a minimum, achieve the Performance Standards, comply with all applicable guidance, and meet the standards of all "applicable requirements" and "relevant or appropriate requirements" as those terms are defined in 40 CFR Part 300.5; as generally described in CERCLA Compliance with Other Laws Manual, Part I (August 1988) EPA/540/G-89/006, Part II (August 1989) EPA/540/G-89/009; and as is required by Section 121 of CERCLA, 42 U.S.C. § 9621.

6. Notwithstanding any action by EPA, Respondents remain fully responsible for achieving the Performance Standards. Nothing in this Order, or in EPA's approval of submissions under this Order, shall be deemed to constitute a warranty or representation of any kind by EPA that full performance of the Work will achieve the Performance Standards. Respondent's or Respondents' compliance with such approved documents does not preclude EPA from seeking additional work to achieve the applicable Performance Standards.

7. Notwithstanding any approvals, permits, or other permissions which may be granted by the United States or other governmental entities, Respondents shall assume any and all liability arising from or relating to their acts or omissions or the acts or omissions of any of their contractors, subcontractors, or any other person acting on their behalf in the performance of the Work or their failure to perform fully or complete the Work.

8. Respondents shall appoint a representative ("Project Coordinator") designated by them to act on their behalf to execute the Joint Work, in accordance with Section XVIII (Remedial Project Manager and Coordinators). In addition, each Respondent shall appoint a representative ("Facility Coordinator") designated by it to act on its behalf to execute the Facility Specific Work, in accordance with Section XVIII (Remedial Project Manager and Coordinators).

9. All aspects of the Work to be performed by Respondents, or by each Respondent in the case of Facility Specific Work, pursuant to this Order shall be under the direction and supervision of a qualified professional architect, engineer, or geologist, as applicable.

10. On the effective date of this Order, Respondents (and each Respondent with regard to Facility Specific Work) shall notify EPA in writing of the name, title, and qualifications of any architect, engineer, or geologist and the names of the principal contractors and/or subcontractors (including laboratories) proposed to be used in carrying out the Work to be performed pursuant to this Order. All personnel performing work at the MEW Site must be qualified to perform those portions of the Work for which they are assigned. Respondents shall submit evidence that all portions of the Work shall be performed (not merely reviewed) by personnel qualified to perform those portions of the

Work for which they are assigned. Selection of any architect, engineer, geologist, contractor, or subcontractor (including laboratories) shall be subject to approval by EPA. If at any time Respondents, or a Respondent in the case of Facility Specific Work, propose to use a different architect, engineer, geologist, contractor, or subcontractor, Respondents shall notify EPA of the name, title, and qualifications of such architect, engineer, geologist, contractor, or subcontractor and shall obtain approval from EPA before the new architect, engineer, geologist, contractor, or subcontractor performs any Work under this Order.

11. If EPA disapproves of the selection of an architect, engineer, geologist, contractor, or subcontractor, Respondents, or the applicable Respondent in the case of Facility Specific Work, shall submit to EPA within thirty (30) days after notice of EPA's disapproval, a list of architects, engineers, geologists, contractors, or subcontractors, as appropriate, including primary support entities and staff, that would be acceptable to Respondents. EPA will thereafter provide written notice to Respondents of the names of the architects, engineers, geologists, contractors, or subcontractors that are acceptable to EPA. Within fifteen (15) days of EPA's designation of approved architects, engineers, geologists, contractors, or subcontractors, Respondents shall both select any approved architect, engineer, geologist, contractor, or subcontractor from that list and notify EPA of the name of the person selected.

12. All materials removed from the MEW Site shall be disposed of or treated at a facility approved by EPA and in accordance with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3); with U.S. EPA Revised Off-Site Policy, OSWER Directive 9834.11 (November 13, 1987); and with all other applicable federal, state, and local requirements.

a. Respondents, or the applicable Respondent in the case of Facility Specific Work, shall, prior to any off-site shipment of hazardous substances from the MEW Site to an out-of-state waste management facility, provide written notification of such shipment of hazardous substances to the appropriate state environmental official in the receiving state and to EPA's Remedial Project Manager. However, the notification of shipments shall not apply to any off-site shipments when the total volume of all shipments from the MEW Site to the receiving state will not exceed ten (10) cubic yards.

b. The notification of any off-site shipments shall be in writing, and shall include the following information, where available: (i) the name and location of the facility to which the hazardous substances are to be shipped; (ii) the type and quantity of the hazardous substances to be shipped; (iii) the expected schedule for the shipment of the hazardous substances; and (iv) the method of transportation. Respondents shall notify the receiving state of major changes in the shipment plan, such as a decision to ship the hazardous substances to another facility within the same state, or to a facility in another state.

13. Respondents shall cooperate with EPA in providing information to the public regarding the Work. As requested by EPA, Respondents shall participate in the preparation of information for distribution to the public and in public meetings which may be held or sponsored by EPA, or in which EPA is a participant, to explain activities at or relating to the MEW Site.

B. Work Requirements.

1. General Description. Respondents shall finance and perform all Work as required by this Order and the Attachments hereto. The Work shall be in accordance with the ROD and shall consist of two parts: Joint Work and Facility Specific Work.

2. Cooperation, Coordination, and Participation.

a. Respondents shall cooperate and participate with each other in performing the Work required by this Order and shall coordinate their Work activities with the activities of the other Respondents.

b. Respondents shall cooperate and participate with Intel and Raytheon in performing the Work required by this Order and shall coordinate their Work activities with the activities that Intel and Raytheon are required to perform at the MEW Site pursuant to a judicial consent decree entered into between Intel, Raytheon, and the United States.

3. Requirements of the Work and Cleanup Standards.

a. Soil Remediation. Pursuant to the ROD and ESD, the selected remedies for soils are: (i) in-situ vapor extraction with vapor phase treatment by granular activated carbon (GAC), and (ii) excavation with treatment by aeration to meet federal, state, and local air standards and OSWER Directive 9355.0-28 Control of Air Emissions From Superfund Air Strippers at Superfund Groundwater Sites (June 15, 1989). The soil cleanup standards are 500 ppb TCE for all soils outside of slurry walls and 1,000 ppb TCE for all soils inside of slurry walls. If EPA determines that the slurry wall systems have

failed at any time to prevent or contain the release of contamination existing within the slurry walls, then soil cleanup standards for the area within that particular slurry wall shall be 500 ppb TCE.

b. Groundwater Remediation. The remedy selected in the ROD, as clarified by the ESD, for groundwater is extraction and treatment by air stripping tower or liquid phase GAC units. Respondents shall provide vapor phase GAC units for air-stripping towers if required by EPA, the Air Resources Board, or the Bay Area Air Quality Management District to meet air emission standards and OSWER Directive 9355.0-28 Control of Air Emissions From Superfund Air Strippers at Superfund Groundwater Sites (June 15, 1989). Groundwater cleanup standards are 5 ppb TCE for the shallow aquifers (including ground water inside the slurry walls) and 0.8 ppb TCE for the deep aquifers.

c. Cleanup Standards for 11 Organics of Concern. According to the ROD and the ESD, it is expected that performing the remedy designed to achieve the cleanup standards for TCE will also result in the cleanup of the other Site organic chemicals listed in Section VI.A.10 (MEW Plume) (i.e., 11 of the 15 primary chemicals of concern, hereinafter referred to as the "11 Organics") and that the resulting concentrations of the 11 Organics will meet ARARs and will not exceed maximum cumulative risk levels. The Operation and Maintenance Plan shall provide for the continued implementation of the remedy in the event that cleanup standards for TCE are achieved, but that applicable concentrations of any of the 11 Organics in the MEW Plume are not reached (that is, if the remedy does not achieve ARARs or cause the cumulative risk to exceed the maximum cumulative risk level for the other contaminants).

d. Groundwater Monitoring. Respondents shall design and implement groundwater monitoring programs as required by this Section IX.C (Joint

Work): (i) to determine the concentrations of antimony, cadmium, arsenic and lead (the "four Inorganics") in the MEW Plume south of Highway 101; and (ii) to determine the concentrations in the MEW Plume of all the chemicals listed in Tables 2-3, 2-4, and 2-5 of the MEW Site Endangerment Assessment (the "Total Detected Chemicals"). Copies of Tables 2-3, 2-4, and 2-5 of the MEW Site Endangerment Assessment are attached hereto as Attachment 3.

C. Joint Work.

1. General Description. Respondents are jointly and severally liable for the Joint Work, which shall include the following: (i) routine operation and maintenance of the groundwater extraction and treatment system remediating the MEW Plume, which shall be referred to hereinafter as the "Regional Groundwater Remediation Program" or "RGRP"; (ii) the operation and maintenance and monitoring of all systems and media (i.e., groundwater and air); (iii) the design and implementation of the Water Reuse Program; (iv) the design and implementation of the Potential Conduit Program; (v) the design and implementation of the Plume Definition Program; (vi) the design and implementation of the Groundwater Chemistry Program; and (vii) if required by EPA, implementation of hydraulic control of that part of the MEW Plume that is north of Highway 101. Obligations of the Joint Work include all reporting requirements regarding the Joint Work.

2. Implementation of the RGRP.

a. The RGRP shall be divided into two parts. Part I will consist of implementation of hydraulic remediation of that part of the MEW Plume that is south of Highway 101. Part II of the RGRP will consist of implementation of hydraulic remediation of that part of the MEW Plume that is north of Highway 101. The design, construction, and implementation of the RGRP shall be jointly and severally performed by Intel and Raytheon pursuant to the terms of a judicial consent decree.

b. Upon dates set by EPA for each of Parts I and II of the RGRP, Respondents shall begin and thereafter maintain routine operation and maintenance activities in accordance with the applicable Operation and Maintenance Plan (O&M Plan) to be submitted to EPA by Intel and Raytheon and approved by EPA pursuant to the terms of a judicial consent decree. Any violation of the EPA approved O&M Plans, or any approved report or plan that is part of the approved O&M Plans, shall be a violation of this Order.

c. If EPA determines that modifications to the O&M Plans are required, then Respondents shall design and implement such modifications at the direction of EPA.

d. Unless otherwise directed by EPA, Respondents shall not perform any groundwater remediation at the MEW Site prior to EPA's authorization and approval to proceed.

3. Progress Reports. Respondents shall submit Progress Reports as required in Section XV (Progress Reports).

4. Data Management Plan. Respondents shall implement the Data Management Plan that is to be submitted to EPA by Intel and Raytheon and approved by EPA pursuant to the terms of a judicial consent decree.

5. Quality Assurance Report. Respondents shall submit a Quality Assurance Report as outlined in Section XVI (Quality Assurance) of this Order.

6. Previously Generated Technical Data and Information. Respondents shall provide EPA with all previously generated technical data and information as required in Section XX (Site Access and Data/Document Availability).

7. Groundwater Monitoring Program. Respondents shall comply with the groundwater sampling plans that are to be submitted to EPA by Intel and Raytheon and approved by EPA pursuant to the terms of a judicial consent decree. EPA, in its discretion, may require Respondents to submit and implement groundwater sampling plans prior to EPA's receipt of the groundwater sampling plans from Intel and Raytheon.

a. If required by EPA and on a date designated by EPA, Respondents shall submit for EPA's approval a sampling plan that provides for the periodic monitoring of the four Inorganics (defined in Section IX.B.3 above). Such plan shall include a proposal for locations of those existing wells that are appropriate for further sampling in light of existing inorganic chemical data. If, at any time, EPA determines that any of the four Inorganics has migrated, then EPA may require Respondents to undertake such additional sampling activities that are necessary to determine the extent of such migration.

b. If required by EPA and on a date designated by EPA, Respondents shall submit for EPA's approval a sampling plan that provides for the periodic monitoring of all the chemicals listed in Tables 2-3, 2-4, and 2-5 of the MEW Site Endangerment Assessment. This plan shall include a proposal for locations of the existing wells that are appropriate for further sampling in light of existing chemical data.

8. Water Reuse Program. Within thirty (30) days of the effective date of this Order, Respondents shall submit for EPA's approval a Water Reuse Program Workplan to outline water reuse options that exist or that can be developed to provide for 100% water reuse of the treated water at the MEW Site. Upon EPA's approval of the Water Reuse Program Workplan, Respondents shall design and implement the Water Reuse Program, in accordance with the schedule to be submitted with the Workplan.

9. Potential Conduit Program. Within twenty-one (21) days after the effective date of this Order, Respondents shall submit for EPA's approval a Potential Conduit Program Workplan for the identification, evaluation, and closing (or containment of further migration if closing is not possible) of all vertical and horizontal conduits of migration of contamination at the MEW Site. Upon EPA's approval of the Potential Conduit Program Workplan, Respondents shall design and implement the Potential Conduit Program, in accordance with the schedule to be submitted with the Workplan.

10. Plume Definition Program.

a. Within twenty-one (21) days after the effective date of this Order, Respondents shall submit for EPA's approval a Plume Definition Workplan including, but not limited to, the scope and methodologies to be used in the Plume Definition Study and an expeditious schedule for the work that is necessary to complete the Plume Definition

Study. Field work required by the Plume Definition Workplan shall commence within fifteen (15) days of EPA's approval of the Plume Definition Workplan. At a minimum, the Plume Definition Study shall include:

(1) Groundwater chemistry sampling that determines the concentrations of the 11 Organics and 4 Inorganics (as defined in Section IX.B.3 above) in the MEW Plume and determines the horizontal and vertical configuration of the MEW Plume;

(2) Detailed delineation of the downgradient horizontal and vertical extents (or contours) of the MEW Plume, including the location of any transmissive channels that could provide rapid transports of contamination; and

(3) Chemistry of the surface waters (including marshes, ponds, and the South Bay) that are commingled with or in the path of the MEW Plume.

11. Groundwater Chemistry Program.

a. Within thirty (30) days after the effective date of this Order, Respondents shall submit for EPA's approval a Groundwater Chemistry Workplan including, but not limited to, the scope and methodologies to be used in the Groundwater Chemistry Study and a schedule for the work that is necessary to complete the Groundwater Chemistry Study. The Groundwater Chemistry Study shall include, but not be limited to, groundwater chemistry sampling and analysis that determines the chemistry of the uncontaminated groundwater surrounding the MEW Plume. Field work required by the Groundwater Chemistry Workplan shall commence within thirty (30) days of EPA's approval of the Groundwater Chemistry Workplan.

12. Hydraulic Control of the MEW Plume. EPA, in its discretion, may require Respondents to maintain hydraulic control of that part of the MEW Plume that is north of Highway 101. For the purpose of this Section IX.C (Joint Work), "hydraulic control" is the prevention of further migration of the MEW Plume.

D. Facility Specific Work.

1. General Description. Each Respondent shall perform Facility Specific Work at all of the locations listed under its name in Section II.A (Description and Characterization of the MEW Site) of this Order. Respondents who presently or formerly owned or occupied the same property and who are liable for its remediation under Section 107 of CERCLA, 42 U.S.C. § 9607, shall be jointly and severally liable for the performance of Facility Specific Work for that property. Each Respondent shall be liable for any additional Facility Specific Work at the MEW Site to the extent that such Respondent is liable for such work pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). Facility Specific Work shall consist of the following tasks: (i) design, construction, and implementation of source and soil remediation systems; (ii) operation, maintenance, and monitoring of source and soil remediation systems; and (iii) maintenance of existing slurry wall systems including inward and upward hydraulic gradients of groundwater within slurry walls. Obligations for Facility Specific Work include all reporting requirements regarding Facility Specific Work as required by this Order.

2. Deliverables and Schedules for Facility Specific Work. Each Respondent shall submit the deliverables and schedules specified in this Section IX.D.2 simultaneously to EPA, to the other Respondents, and to Intel and Raytheon.

a. Source Control Workplan. Within thirty (30) days after the effective date of this Order, each Respondent shall submit a Source Control Workplan to EPA for review and approval. The Source Control Workplan shall include: (i) a detailed plan for the activities to be undertaken to remove or remediate all sources of the chemicals listed in Section VI.A.10 (MEW Plume) (hereinafter referred to as "source" or "sources") originating from properties owned or operated (or formerly owned or operated) by Respondent; (ii) a detailed plan for attaining and maintaining all requirements, including Performance Standards; (iii) provisions to investigate the presence, location, and extent of sources; (iv) a detailed description of the tasks and deliverables that Respondent will complete during the remedial design phase; (v) a schedule for completing the tasks and deliverables that is consistent with the time-frames set forth in this Order; (vi) a narrative description of the engineering and construction approaches to the Facility Specific Work, including a description of who will perform the various aspects of the Work; (vii) a list of Respondent's nominations for the Independent Quality Assurance Team, as described in EPA's Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties (April 1990) EPA/540/G-90/001; and (viii) an engineering procedures manual that fully describes the procedures for generating, reviewing, checking, issuing, and correcting engineer and design documents.

b. Source Control Remedial Design. Each Respondent shall submit for EPA approval a Source Control Remedial Design ("SCRD") that shall contain proposed final construction plans and specifications for source control and soil remediation. The SCRD shall be submitted in the following phases:

(1) Preliminary Design. Each Respondent shall submit a Preliminary Design within ninety (90) days of EPA's approval of the applicable Respondent's Source Control Workplan. The Preliminary Design shall include, but not be limited to, the following information assembled into a Project Design Manual:

(a) Design bases including (i) a clear and concise restatement of previous data relied upon for the design, and (ii) a design analysis necessary to satisfy state or local permitting requirements;

(b) Major equipment specifications list for the treatment units;

(c) Location and screen intervals for monitoring wells;

(d) Approximate extraction rates, screen intervals, and location for all extraction wells;

(e) Site plan (piping/layout);

(f) Draft process flow diagrams for treatment units;

(g) System down-time analysis;

(h) Ancillary equipment;

(i) Exception/punch list;

(j) Design criteria: Preliminary description of how Performance Standards will be attained;

(k) Proposed schedule for sampling of specified monitoring wells; and

(l) Overall schedule.

(2) Intermediate Design. Each Respondent shall submit an Intermediate Design within forty-five (45) days of EPA's approval of the applicable Respondent's Preliminary Design. The Intermediate Design shall include, but not be limited to, the following information assembled into a Design Implementation Package:

(a) Material and equipment requisitions;

(b) Site preparation requirements;

(c) Additional process requirements and final process flow diagrams;

(d) Recommended vendor lists;

(e) Quality Control source list;

(f) Permitting program and plan; and

(g) Punchlist of needed items.

(3) Proposed Final Design. Each Respondent shall submit a Proposed Final Design Package with specifications within forty-five (45) days of EPA's approval of the applicable Respondent's Intermediate Design. The Proposed Final Design Package shall include, but not be limited to, the following:

(a) Construction bid documents, including all revisions of and additions to the Intermediate Design:

(1) Part I — plans and drawings: (i) site drawings, (ii) construction drawings, (iii) site fabrication drawings, (iv) site environmental monitoring plan, (v) single utility lines, and (vi) pipe and instrument diagrams;

(2) Part II — procurements: (i) bid comparison, (ii) purchase orders with confirmed delivery dates, and (iii) plant catalog;

(3) Part III — manuals: (i) operations monitoring; (ii) safety; (iii) startup, testing, and commissioning of operation and maintenance;

(4) Part IV — work orders for engineers;

(b) Construction QA/QC plan;

(c) Specifications for provisions for gaining access to and obtaining samples from adjacent properties; and

(d) Detailed description of compliance with Performance Standards and ARARs.

c. Source Control Remedial Implementation Plan. Each Respondent shall submit a Source Control Remedial Implementation Plan ("SCRIP") outlining proposals for the execution of the SCRD and other actions necessary to control adequately any source and to remediate the soil. The SCRIP should be submitted in the following phases:

(1) Construction Operation and Maintenance Plan ("COMP"). This plan shall be submitted within sixty (60) days of EPA's approval of the applicable Respondent's Proposed Final SCRD. It shall address construction and start-up activities and include, but not be limited to, the following:

(a) Construction schedules;

(b) Project organization and responsibilities;

(c) QA/QC plans;

(d) Sampling plans;

(e) Schedules associated with start-up activities;

(f) Health and safety plan;

(g) Equipment and decontamination procedures; and

(h) Plans for the disposal of contaminated or potentially contaminated material.

Within sixty (60) days of EPA's approval of the COMP, the applicable Respondent shall begin the construction phase of the soil remediation or any other contamination source removal or remedial action. Within two hundred forty (240) days of the approval of the COMP, the applicable Respondent shall begin facility specific start-up activities.

(2) Operation and Maintenance Plan (O&M Plan). Within one hundred eighty (180) days of the initiation of construction, the applicable Respondent shall submit a proposed plan for operating and maintaining source related equipment and treatment units and ensuring the effectiveness of the remedy through continued monitoring. The plan shall conform in all cases to the plans, specifications, design conditions and other stipulations set forth in the Final Remedial Design and this Order. Such proposed O&M Plan shall include, but not be limited to, the following:

(a) Proposed method for determining location and necessity of wells to be installed in later phases of the remediation;

(b) Recommended frequency of water level measurements and water quality testing for extraction and monitoring wells;

(c) Proposed decision-making process and criteria for shutting down specific extraction wells;

(d) Recommended frequency and methodologies for testing and monitoring groundwater, groundwater gradients, and air and water emissions from treatment units;

(e) Recommended wells and sampling frequency for monitoring the "C" and "deep" aquifers;

(f) Recommended wells and sampling frequency for monitoring the "A" and "B" aquifers;

(g) A plan for sampling to evaluate the effectiveness of the remediation;

(h) Project organization and responsibility;

(i) Health and safety plans;

(j) Equipment decontamination procedures;

(k) Plans for disposal of contaminated or potentially contaminated material;

(l) Operation and maintenance schedules; and

(m) QA/QC plan, including elements necessary for the implementation of trial test(s) of the pumping

and treatment system and a description of the mechanism used to verify that the extraction and treatment process is operating within acceptable limits.

Upon written notification from EPA's RPM, the applicable Respondent shall begin and thereafter maintain routine operation and maintenance activities in accordance with the approved O&M Plan. Each Respondent shall continue operation of the source control and soil remediation activities until EPA determines that the remedial objectives of the ROD and ESD have been satisfied and the requirements of this Order are met.

d. Progress Reports. Each Respondent shall submit Progress Reports as required in Section XV (Progress Reports), detailing its Facility Specific Work and the results of the implementation of its Facility Specific Work under this Section IX.D (Facility Specific Work).

e. Data Management Plan. Each Respondent shall submit a Data Management Plan as outlined in Section XX (Site Access and Data/Document Availability) of this Order.

f. Confirmatory Sampling Report. Each Respondent shall submit a Confirmatory Sampling Report for EPA approval at the conclusion of its soil remediation activities.

X. FAILURE TO ATTAIN PERFORMANCE STANDARDS

A. In the event that EPA determines that additional response activities are necessary to meet applicable Performance Standards, EPA may notify Respondents that additional response actions are necessary.

B. Unless otherwise stated by EPA, within thirty (30) days of receipt of notice from EPA that additional response activities are necessary to meet applicable Performance Standards, Respondents shall submit for EPA's approval a work plan for the additional response activities. The plan shall conform to all applicable requirements of Sections IX, XVI, and XVII of this Order. Upon EPA's approval of the plan pursuant to Section XIV of this Order, Respondents shall implement the plan for additional response activities in accordance with the schedule contained therein.

XI. EPA PERIODIC REVIEW

A. Under Section 121(c) of CERCLA, 42 U.S.C. § 9621(c), and any applicable regulations, EPA may review the MEW Site conditions to assure that the Work performed pursuant to this Order adequately protects human health, welfare, and the environment. Until such time as EPA certifies completion of the Work, Respondents shall conduct the requisite studies, investigations, or other response actions as EPA determines necessary in order to permit EPA to conduct the review under Section 121(c) of CERCLA, 42 U.S.C. § 9621(c). As a result of any review performed under this Section XI (EPA Periodic Review), Respondents may be required to perform additional Work or to modify Work previously performed.

XII. ADDITIONAL RESPONSE ACTIONS

A. EPA may determine that in addition to the Work identified in this Order and attachments to this Order, additional response activities may be necessary to protect human health, welfare, and the environment. If EPA determines that additional response activities are necessary, EPA may require Respondents to submit a work plan for additional response

activities. EPA may also require Respondents to modify any plan, design, or other deliverable required by this Order, including any approved modifications.

B. Not later than thirty (30) days after receiving EPA's notice that additional response activities are required pursuant to this Section XII (Additional Response Actions), Respondents shall submit a work plan for the response activities to EPA for review and approval. Upon EPA's approval, the work plan shall be incorporated into this Order as a requirement of this Order and shall be an enforceable part of this Order. Upon EPA's approval of the work plan, Respondents shall implement the work plan according to the standards, specifications, and schedules in the approved work plan. Respondents shall notify EPA of their intent to perform such additional response activities within seven (7) days after receipt of EPA's request for additional response activities.

XIII. ENDANGERMENT AND EMERGENCY RESPONSE

A. In the event of any action or occurrence during the performance of the Work which causes or threatens to cause a release of a hazardous substance or which may present an immediate threat to the public health or welfare or to the environment, Respondents shall immediately take all appropriate actions to prevent, abate, or minimize the threat, and shall immediately notify EPA's Remedial Project Manager ("RPM") (see Section XVIII below). If the RPM is unavailable, Respondents shall notify the EPA Emergency Response Unit, Region IX, at (415) 744-2000. Respondents shall take such action in consultation with EPA's RPM and in accordance with all applicable provisions of this Order, including but not limited to the Health and Safety Plan required by Section IX (Work To Be Performed) of this Order. In the event that Respondents fail to take appropriate response action as required by this Section XIII (Endangerment and Emergency Response), and EPA takes that action instead, Respondents shall be liable to EPA for all costs of the response action.

B. The Director of the Hazardous Waste Management Division, EPA Region IX, may determine that acts or circumstances (whether related to or unrelated to this Order) may endanger human health, welfare, or the environment and may order Respondents to stop further implementation of this Order until the endangerment is abated. EPA may also, for any other reason permitted by law, order Respondents to cease activities at the MEW Site.

C. EPA's Remedial Project Manager shall have authority, consistent with the NCP, to halt any Work required by this Order and to take any necessary response actions.

D. Nothing in the preceding paragraphs shall be deemed to limit any authority of the United States to take, direct, or order all appropriate action to protect human health, welfare, and the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances on, at, or from the MEW Site.

XIV. EPA REVIEW OF SUBMISSIONS

A. After review of any deliverable, plan, report, or other item which is required to be submitted for review and approval pursuant to this Order, EPA may: (i) approve the submission; (ii) approve the submission with modifications by EPA; (iii) disapprove the submission and direct Respondents to re-submit the document after addressing all of EPA's comments; or (iv) disapprove the submission and assume responsibility for performing all or any part of any response action that is or should have been addressed by the submission.

B. In the event of approval or approval with modifications by EPA, the applicable Respondents shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA, and in accordance any applicable schedule contained therein.

C. Upon receipt of a notice of disapproval or a request for a modification, the applicable Respondent(s) shall, within ten (10) days or such longer time as specified by EPA in its notice of disapproval or request for modification, correct the deficiencies by addressing all of EPA's comments and resubmit the plan, report, or other item for EPA approval. Notwithstanding the notice of disapproval, or approval with modifications, the applicable Respondent(s) shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission.

D. Submission of a deficient plan, report, or other submittal or failure to submit a plan, report, or other submittal shall be considered a violation of this Order. An approval by EPA pursuant to Section XIV.C above of an initially disapproved submission shall cure the applicable Respondents' violation.

E. All reports, plans, specifications, schedules, appendices, and attachments required by this Order are, upon EPA's approval, incorporated into this Order as requirements of this Order and shall be an enforceable part of this Order. Any noncompliance with such EPA-approved reports, plans, specifications, schedules, appendices, or attachments shall be considered a violation of this Order.

F. All approvals and decisions of EPA made regarding submittals and modifications under this Order will be communicated to the applicable Respondents by the Director, Hazardous Waste Management Division, EPA Region IX, or his representative.

No informal advice, guidance, suggestions, or comments by EPA regarding reports, plans, specifications, schedules, or any other matter shall relieve Respondents of their obligations to obtain formal approvals as required by this Order.

G. EPA's approval of any plan, report, or other submittal under this Order shall not be deemed to imply that EPA agrees with every statement or characterization contained in such plan, report, or other submittal.

H. Notwithstanding any approval which may be granted by EPA, no warranty of any kind is provided by EPA with regard to the Work.

XV. PROGRESS REPORTS

A. Nature of Progress Reports. At a minimum, Progress Reports shall: (i) describe the actions which have been taken to comply with this Order during the prior month, including a general description of activities commenced or completed during the reporting period; (ii) include all results of sampling and tests and all other data received by Respondent and not previously submitted to EPA; (iii) describe all Work planned for the next reporting period, with updated schedules that show overall Work completed, Work planned for the next reporting period, and the overall project schedule for Work completion; (iv) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays; and (v) include an interpretation or explanation of the data. Progress Reports shall conform to the format specifications established by EPA's RPM for such items as drawings, maps, reports, and manuals. Work activities include, but are not limited to, construction activities, sampling events, data collection, and lab results.

B. Monthly Progress Reports. In addition to the other deliverables set forth in this Order, Respondents shall provide Monthly Progress Reports to EPA with respect to the Work undertaken pursuant to this Order. For each month following the effective date of this Order, a Progress Report shall be submitted by the Project Coordinator to EPA by the tenth (10) day of each month for Work done the preceding month and planned for the current month. Monthly Progress Reports shall address both the Joint Work and each Respondent's Facility Specific Work. Each Respondent shall provide its written progress report for its Facility Specific Work for that month to the Project Coordinator for inclusion into the Monthly Progress Reports. Respondents obligation to submit Monthly Progress Reports continues until five (5) years after the effective date of this Order. During construction activities, progress photographs shall be submitted as part of each Monthly Progress Report.

C. Quarterly Progress Reports. Respondents shall provide Quarterly Progress Reports to EPA with respect to the Work undertaken pursuant to this Order. These reports shall be submitted by the Project Coordinator to EPA by the last day of the months of January, April, July, and October, and shall describe the Work completed during the preceding quarter and planned for the current quarter. Quarterly Progress Reports shall address both the Joint Work and each Respondent's Facility Specific Work. Each Respondent shall provide its written progress report for its Facility Specific Work for that quarter to the Project Coordinator for inclusion into the Quarterly Progress Reports. Respondents obligation to submit Quarterly Progress Reports commences five (5) years after the effective date of this Order.

D. Annual Progress Reports. Respondents shall provide Annual Progress Reports to EPA that summarize and evaluate all Joint Work and Facility Specific Work undertaken pursuant to this Order. Annual Progress Reports shall include Work conducted during the

previous year and outline planned activities for the upcoming year and three (3) months. Respondents obligation to submit Annual Progress Reports commences with the effective date of this Order. These reports shall be submitted to EPA by March 1 for the preceding calendar year. Each Respondent shall provide its written progress report for its Facility Specific Work for that year to the Project Coordinator for inclusion into the Annual Progress Reports.

E. Respondents shall submit other reports to EPA during the course of Remedial Design and Remedial Action in the time and manner as EPA may direct.

XVI. QUALITY ASSURANCE

A. Respondents, and each Respondent, shall submit to EPA for approval comprehensive Quality Assurance ("QA") Project Plan(s) for all Work to be performed pursuant to this Order. The QA Project Plan(s) shall be prepared in accordance with (i) EPA's Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans (December 1980), QAMS 005/80; (ii) EPA Region IX's Guidance for Preparing Quality Assurance Project Plans for Superfund Remedial Projects (September 1989), 90A-03-89; (iii) EPA's Data Quality Objectives Development Guidance for Remedial Response Actions, EPA/540/G87/003 and 004; and (iv) any superseding or amended version of these documents provided by EPA to Respondents. In addition, QA/QC procedures in the QA Project Plan(s) must conform with the EPA Method 500 Series approved for safe drinking water analysis, and the procedures described in Section XVI.C below. Upon receipt of EPA's approval of each Final QA Project Plan, Respondents, or the applicable Respondent, shall immediately implement the QA Project Plan.

B. Respondents shall use the quality assurance, quality control, and chain of custody procedures described in the QA Project Plan(s) approved by EPA pursuant to this Section XVI (Quality Assurance). The applicable procedures described in the QA Project Plan(s) shall be used for field work, sample collection, and analysis activities. In addition, Respondents shall use chain of custody procedures described in (i) EPA's NEIC Policies and Procedures Manual (May 1978, revised May 1986), EPA-330/9-78-001-R; (ii) National Enforcement Investigation Center Manual for the Evidence Audit (September 1981); and (iii) any amendments to or revisions of these documents, while conducting all sample collection and analysis activities required herein by any plan.

C. To provide quality assurance and maintain quality control, Respondents, or each Respondent in the case of Facility Specific Work, shall:

1. Use only laboratories which have a documented Quality Assurance Program that complies with EPA guidance document QAMS-005/80.

2. Ensure that all contracts with laboratories used by Respondents (i) provide for access of EPA personnel and EPA's authorized representatives to the laboratory and (ii) allow EPA personnel and EPA's authorized representatives to consult with personnel that Respondents use to perform analyses.

3. Ensure that all laboratories utilized by Respondents for analysis of samples taken pursuant to this Order participate in an EPA or EPA-equivalent Laboratory Water Supply Performance Evaluation Study. As part of the QA Program all laboratories used by Respondents for analysis of samples shall perform, upon EPA's advance notice to such laboratories and not at EPA's expense, analyses of samples provided by EPA to demonstrate the quality of each laboratory's data. If a laboratory used by Respondents is

certified for drinking water analyses by the California DHS, Respondents shall request that the laboratory include a notation of the valid certification on the title page of the analyses results report.

4. Specify that laboratories used maintain and provide, upon request, the records outlined in Laboratory Documentation Requirements for Data Validation (January 1990) 9QA-07-90; and, ensure that all laboratory data validation specified in the QA Project Plan(s) be performed in accordance with (i) the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analysis (July 1988), (ii) the Laboratory Data Validation Functional Guidelines for Evaluating Organic Analysis (February 1988), and (iii) any amended or superseding versions of the above referenced documents. The frequency of laboratory data validation will be specified in the QA Project Plan(s).

5. Require by contract and use their best efforts to ensure that for samples taken for the purpose of implementing this Order the sample volume unused by the laboratory shall be retained at the laboratory for ninety (90) days after sample analysis, and that any sample extractions from laboratory analyses be retained at the laboratory for one (1) year after sample analysis. When required by an analytical method, samples and extracts must be stored in a refrigerator and in accordance with applicable guidance.

6. Ensure that all sampling plans prepared pursuant to this Order shall comply with the requirements of this Section XVI (Quality Assurance) and be prepared in accordance with Preparation of a U.S. EPA Region IX Field Sampling Plan for Private and State-Lead Superfund Projects (April 1989) 9QA-06-89.

7. Include a quality assurance report as part of their Monthly Progress Reports for the months of December, March, June, and September each year, or as part of their Quarterly Progress Reports, whichever is applicable pursuant to Section XV (Progress Reports). Such reports shall contain information that demonstrates that Respondents are complying with this Section XVI (Quality Assurance) and the QA/QC Plans for both the Joint Work and the Facility Specific Work.

XVII. COMPLIANCE WITH APPLICABLE LAWS

A. All Work performed by Respondents pursuant to this Order shall comply with the ARARs identified in the ROD. All activities by Respondents pursuant to this Order shall also be performed in accordance with the requirements of all applicable federal, state, and local laws, regulations, and permitting requirements; provided, that, as set forth in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and the NCP, no permit shall be required for any portion of the Work conducted entirely on-Site. Where any portion of the Work requires a federal or state permit or approval, Respondents shall submit timely applications and take all other actions necessary to obtain and to comply with all such permits or approvals.

B. This Order is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

C. EPA has determined that the response actions required by this Order, if performed in accordance with this Order, are consistent with CERCLA and the NCP.

D. Nothing in this Order shall be deemed to constitute a pre-authorization of a CERCLA claim within the meaning of Sections 111 or 112 of CERCLA, 42 U.S.C. §§ 9611 or 9612.

XVIII. REMEDIAL PROJECT MANAGER AND COORDINATORS

A. All communications, whether written or oral, from any Respondent to EPA shall be directed to EPA's Remedial Project Manager ("RPM"). Respondents shall submit to EPA four copies of all documents, including plans, reports, and other correspondence, which are developed pursuant to this Order, and shall send these documents by certified mail, return receipt requested.

B. EPA's RPM is:

Patti Collins
H-6-3
United States Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105
Telephone No. (415) 744-2229

C. EPA has the unreviewable right to change its RPM.

D. EPA's RPM shall have the authority lawfully vested in the Remedial Project Manager and On-Scene Coordinator by the NCP, 40 CFR Part 300 et seq. EPA's RPM shall have authority, consistent with the NCP, to halt any work required by this Order, and to take any necessary response action.

E. Within two (2) days after the effective date of this Order, Respondents shall designate a Project Coordinator to act on their behalf for the Joint Work required by this Order and each Respondent shall designate a Facility Coordinator to act on its behalf for the Facility Specific Work required by this Order. The names of the Project and Facility Coordinators shall be submitted to EPA for review and approval. If EPA disapproves of the selection of a Project or Facility Coordinator, Respondents, or the applicable Respondent in the case of Facility Specific Work, shall submit to EPA within thirty (30) days after notice of EPA's disapproval, a list of Project or Facility Coordinators that would be acceptable to Respondents. EPA will thereafter provide written notice to Respondents of the names of the Project or Facility Coordinators that are acceptable to EPA. Within fifteen (15) days of EPA's designation of approved Project or Facility Coordinators, Respondents shall both select any approved Project or Facility Coordinator from that list and notify EPA of the name of the person selected.

F. If Respondents wish to change their Project Coordinator or any Respondent wishes to change its Facility Coordinator, the applicable Respondents shall provide written notice to EPA, five (5) days prior to changing the Project or the Facility Coordinator, of the name and qualification of the new Coordinator for EPA's review and approval.

G. Respondents' Project Coordinator shall be responsible for overseeing Respondents' implementation of the Joint Work of this Order and for coordinating communication between EPA and Respondents.

H. Each Facility Coordinator shall be responsible for overseeing Respondent's implementation of the Facility Specific Work of this Order, for providing its facility specific progress reports to the Project Coordinator for inclusion in the appropriate Progress Reports that are submitted to EPA pursuant to Section XV (Progress Reports), and for

coordinating communication between EPA, Respondent, and the other Respondents. Each Facility Coordinator shall concurrently provide to the Project Coordinator copies of all reports submitted to EPA pursuant to this Order and shall inform the Project Coordinator in writing of actions taken by such Respondent to comply with its obligations under Section IX.D (Facility Specific Work) of this Order and any problems that have been encountered or are anticipated by such Respondent in commencing or completing the Facility Specific Work.

XIX. ACCESS TO PROPERTY NOT OWNED BY RESPONDENTS

A. If either (i) the Site, (ii) the off-Site area that is to be used for access, (iii) other property subject to or affected by the cleanup, or (iv) the property where documents required to be prepared or maintained by this Order are located, is owned in whole or in part by parties other than those bound by this Order, Respondents shall obtain, or use its best efforts to obtain, site access agreements from the present owner(s), or from persons who have control over the property, including lessees, within thirty (30) days of the effective date of this Order. Such agreements shall provide access for Respondents, EPA, and the State, as well as their respective contractors, oversight officials, and authorized representatives; and such agreements shall specify that Respondents are not EPA's representatives with respect to liability associated with MEW Site activities. Copies of such agreements shall be provided to EPA prior to Respondents' initiation of field activities. Respondents' best efforts shall include providing reasonable compensation to any off-Site property owner.

B. If access agreements are not obtained within the time referenced above, Respondents shall notify EPA within five (5) days thereafter regarding both the lack of, and their efforts to obtain, such agreements. If Respondents cannot obtain access

agreements, EPA, in its sole discretion, may use its legal authority to obtain access for Respondents, may perform those tasks or activities with EPA employees or EPA contractors, may modify or amend the Order, or may terminate the Order.

C. In the event that EPA, or its contractors, performs those tasks or activities and does not modify, amend, or terminate the Order, Respondents shall perform all other activities not requiring access to that particular area of the MEW Site. Respondents shall integrate the results of any such tasks undertaken by EPA into its reports and deliverables.

XX. SITE ACCESS AND DATA/DOCUMENT AVAILABILITY

A. Respondents shall allow EPA and its authorized representatives and contractors to enter and freely move about all property at the MEW Site and off-Site areas subject to or affected by the Work under this Order or where documents required to be prepared or maintained by this Order are located, as deemed necessary by EPA, including, but not limited to, such access for the purpose of (i) inspecting conditions, activities, the results of activities, records, operating logs, and contracts related to the MEW Site or Respondents and its representatives or contractors pursuant to this Order; (ii) reviewing the progress of Respondents in carrying out the terms of this Order; (iii) conducting tests as EPA or its authorized representatives or contractors deem necessary; (iv) using a camera, sound recording device or other documentary type equipment; (v) obtaining samples at or near the MEW Site; and (vi) verifying any data submitted to EPA. Respondents shall allow EPA and its authorized representatives or contractors to inspect and copy all records, files, titles, photographs, documents, sampling and monitoring data, and other writings related to the work undertaken in carrying out this Order. Nothing herein shall be interpreted as limiting or affecting EPA's right of entry or inspection authority under federal law.

B. In the event that any Respondent transfers some or all of its property located within the boundaries of the MEW Site to a third party after the effective date of this Order, that Respondent shall (i) assure that the instrument effecting the conveyance or transfer of title contains a copy of this Order (including all attachments) and the listing of those portions of the MEW Site that are on the NPL; and (ii) use its best efforts to assure access to the property for the other Respondents, EPA, and the State, as well as their respective contractors and authorized representatives, from the third party.

C. Under the provisions of Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), EPA explicitly reserves the right to observe the Work of Respondents as it is performed. In addition, EPA and its authorized representatives reserve the right, at EPA's request, to take splits or duplicates of any samples obtained by any Respondent or anyone acting on any Respondent's behalf in the implementation of the Work. Furthermore, EPA shall have the right to take any additional samples that EPA deems necessary.

D. Respondents, or the applicable Respondent in the case of Facility Specific Work, shall notify EPA not less than fourteen (14) days in advance of any sample collection activity. Respondents, or the applicable Respondent in the case of Facility Specific Work, shall notify EPA not less than fourteen (14) days in advance of any disposal of any such sample, and EPA shall have an opportunity to take possession of all or a portion of such sample. Respondents, or the applicable Respondent in the case of Facility Specific Work, shall notify EPA seven (7) days in advance of any changes in the routine sampling schedule. If changes in any routine sampling are required as a result of unexpected conditions, Respondents, or the applicable Respondent in the case of Facility Specific Work, shall orally notify EPA forty-eight (48) hours prior to any modifications or proposed changes to the date of any sampling activity.

E. Respondents shall provide EPA with all technical data and information relating to the environmental problems, public health threats, Site conditions, Site use and history, contaminant incidence and migration, and regional environmental conditions relating to the MEW Site as such data and information becomes available, including, but not limited to:

1. Raw analytical, monitoring, sampling, geographical, hydrogeological, geological, meteorological, surface water, seismic, landfill gas, subsurface gas, or ambient air data (including all supporting documents), resulting from any environmental testing relating to the MEW Site;

2. Technical working drafts and final reports, letter reports, workplans, summaries, interpretations, documents, records, files, memoranda, status reports, and written material developed using any source, including EPA, relating to the MEW Site;

3. Technical maps, computer generated graphics, charts, tables, data sheets, geological cross-sections, lithologic logs, graphs, photographs, slides, or other such material developed relating to the MEW Site; and

4. Computerized technical data and information relating to the MEW Site, including any creation, sorting, display, and organization of a data base, the form and format of such data either to be determined in the Data Management Plan or to be established by EPA.

F. Respondents, or any applicable Respondent in the case of Facility Specific Work, shall notify EPA no less than thirty (30) days in advance of the commencement of any project which is likely to affect implementation of the remedy or to produce data or information that would affect an evaluation of the remedy, including, but not limited to,

projects involving the removal of underground tanks, construction or removal of facilities, pilot studies, and well sealings.

G. All data, factual information, and documents submitted by Respondents to EPA pursuant to this Order shall be subject to public inspection. Respondents shall not assert confidentiality claims with respect to any data related to the MEW Site conditions, sampling, or monitoring (including hydrogeological or chemical data, data submitted in support of a remedial proposal, and any other scientific or engineering data) or for documents that fall under Section 104(e)(7(F) of CERCLA, 42 U.S.C. § 9604(e)(7)(F). Respondents may assert a claim of business confidentiality covering part or all of the information submitted to EPA pursuant to the terms of this Order under 40 CFR Part 2.203, provided such claim is not inconsistent with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), or other provisions of law. Any such claim shall be asserted in the manner described by 40 CFR 2.203(b) and substantiated by Respondents at the time the claim is made. Information determined to be confidential by EPA will be given the protection specified in 40 CFR Part 2. If no such claim accompanies the information when it is submitted to EPA, it may be made available to the public by EPA or the State without further notice to Respondents.

H. For the period during which this Order is in effect, each Respondent shall maintain an index of any documents that Respondent claims contains privileged information or confidential business information. The index shall contain, for each document, the date, author, addressee, and subject of the document. Upon written request from EPA, Respondents shall submit a copy of the index to EPA.

I. Within sixty (60) days of the effective date of this Order, each Respondent shall propose to EPA a Data Management Plan to manage and organize data collected pursuant to this Order. Upon approval by EPA, the applicable Respondent shall implement the Data Management Plan.

J. Within fifteen (15) days of the effective date of this Order, Respondents shall submit to EPA all previously generated technical data, including but not limited to well locations (including the wells longitude, latitude, and elevation), well construction data, groundwater chemistry, groundwater potentiometeric surface measurements, and soil borings and soil gas sample locations and results. Such technical data is to be in digital format on computerized tape(s) or disc(s) that is(are) compatible with EPA Region IX's computer system.

XXI. RECORD PRESERVATION

A. Each Respondent (and Respondents collectively) shall provide to EPA, upon request, clear and legible copies, as well as access to the originals, of any and all documents and information within its possession or control or in possession or control of its divisions, employees, agents, accountants, contractors, or attorneys (other than documents or information privileged under attorney-client or work product privileges) relating to activities at the MEW Site or to the implementation of this Order, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Each Respondent shall also make available to EPA for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

B. For a minimum period of ten (10) years following Respondents' completion of the Work pursuant to this Order, each Respondent shall preserve and retain all records and documents in its possession or control or in the possession of its divisions, employees, agents, accountants, contractors, or attorneys, that relate in any manner to the Work, environmental conditions at the MEW Site, the causes of the environmental conditions at the MEW Site, Respondent's liability for those environmental conditions, Respondent's use or disposal of hazardous substances at the MEW Site, or the implementation of this Order. At the conclusion of this document retention period, each Respondent shall notify EPA at least ninety (90) days prior to the destruction of any such records or documents. If EPA requests that any or all of the documents be saved, the applicable Respondent shall, at no cost to EPA, deliver to EPA the documents or copies of the documents.

C. Until at least ten (10) years after Respondents' completion of the Work pursuant to this Order, each Respondent shall preserve, and shall instruct its contractors and agents to preserve, all documents, records, and information of whatever kind, nature, or description relating to the performance of the Work. Upon the conclusion of this document retention period, each Respondent shall notify EPA at least ninety (90) days prior to the destruction of any such records or documents. If EPA requests that any or all of the documents be saved, the applicable Respondent shall, at no cost to EPA, deliver to EPA the documents or copies of the documents.

D. Within thirty (30) days after the effective date of this Order, each Respondent shall submit a written certification to EPA's RPM stating whether or not Respondent has altered, mutilated, discarded, disposed of, or destroyed, since notification of potential liability by the United states or the State, any records, documents, or other information relating to: (i) its potential liability under CERCLA, and (ii) its use of or disposal of hazardous substances with regard to the MEW Site. Each Respondent shall not dispose of

any such documents without prior EPA approval. If EPA requests any or all of these documents, the applicable Respondent shall, at no cost to EPA, deliver to EPA the documents or copies of the documents.

XXII. DELAY IN PERFORMANCE

A. Any delay in performance of this Order that, in EPA's judgment, is not properly justified by Respondents, or by a Respondent in the case of Facility Specific Work, shall be considered a violation of this Order. Any delay in performance of this Order shall not affect Respondents', or Respondent's in the case of Facility Specific Work, obligations to fully comply with all terms and conditions of this Order.

B. Respondents, or the applicable Respondent in the case of Facility Specific Work, shall notify EPA of any delay or anticipated delay in performing any requirement of this Order. Such notification shall be made by telephone to EPA's RPM within twenty-four (24) hours after Respondents first knew or should have known that a delay might occur. Respondents shall adopt all reasonable measures to avoid or minimize any such delay. Within two (2) business days after notifying EPA by telephone, Respondents shall provide written notification fully describing: (i) the nature of the delay; (ii) any asserted justification for the delay; (iii) any reason why Respondents should not be held strictly accountable for failing to comply with any relevant requirements of this Order; (iv) the measures planned and taken to minimize the delay; and (v) a schedule for implementing the measures that will be taken to mitigate the effect of the delay. Increased costs or expenses associated with implementation of the activities called for in this Order are not a justification for any delay in performance.

XXIII. ASSURANCE OF ABILITY TO COMPLETE WORK

A. Respondents, and each Respondent in the case of Facility Specific Work, shall demonstrate their ability to complete the Work required by this Order and to pay all claims that arise from the performance of the Work by obtaining and presenting to EPA for approval within thirty (30) days of the effective date of this Order, one of the following: (i) a performance bond; (ii) a letter of credit; (iii) a guarantee by a third party; or (iv) internal financial information which is sufficient to allow EPA to determine that Respondents have sufficient assets available to perform the Work. Respondents shall demonstrate financial assurance in an amount no less than the estimate of cost for the Work to be performed under this Order. If Respondents seek to demonstrate ability to complete the Work by means of internal financial information, or by guarantee of a third party, they shall re-submit such information on a quarterly basis. If EPA determines that such financial information is inadequate, Respondents shall, within thirty (30) days after the receipt of EPA's notice of determination, obtain and present to EPA for approval one of the other three forms of financial assurance listed above.

B. At least seven (7) days prior to commencing any work at the MEW Site pursuant to this Order, Respondents, and each Respondent in the case of facility Specific Work, shall submit to EPA a certification that Respondents or their contractors and sub-contractors have adequate insurance coverage or have indemnification for liabilities for injuries or damages to persons or property which may result from the activities to be conducted by or on behalf of Respondents pursuant to this Order. Respondents shall ensure that such insurance or indemnification is maintained for the duration of the Work required by this Order.

XXIV. UNITED STATES NOT LIABLE

The United States, its agencies, employees, or other representatives, by issuance of this Order, assumes no liability for any injuries or damages to persons or property resulting entirely or partially from the acts or omissions of any or all Respondents, or their directors, officers, employees, agents, representatives, successors, assigns, contractors, or consultants in carrying out any action or activity pursuant to this Order. The United States, its agencies, employees, and other representatives, shall not be deemed to be a party to any contract entered into by any or all Respondents or their directors, officers, employees, agents, representatives, successors, assigns, contractors, or consultants in carrying out any action or activity pursuant to this Order. Respondents, their directors, officers, employees, agents, successors, assigns, contractors, and consultants shall not be considered agents of the United States.

XXV. ENFORCEMENT AND RESERVATION

A. EPA reserves the right to bring an action against any or all Respondents under Section 107 of CERCLA, 42 U.S.C. § 9607, for recovery of any response costs incurred by the United States related to the releases or threatened releases at or from the MEW Site or related to this Order and not previously reimbursed by Respondents, as well as any other past and future costs incurred by the United States in connection with response activities conducted under CERCLA at the MEW Site. This reservation shall include, but not be limited to, past costs, direct costs, the cost of oversight, indirect costs, the costs of any response actions EPA takes at the MEW Site, costs for compiling the cost documentation to support oversight cost demand, as well as accrual of interest as provided in Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). In addition, EPA reserves the right to bring an action against any and all Respondents for injunctive relief and/or civil penalties under Section

106 of CERCLA, 42 U.S.C. § 9606, and/or for treble damages under Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3).

B. Notwithstanding any other provision of this Order, at any time during the response action, EPA may perform its own studies, complete the response action (or any portion of the response action) as provided in CERCLA and the NCP, and seek reimbursement from any or all Respondents for its costs, or seek any other appropriate relief.

C. Nothing in this Order shall preclude EPA from taking any additional enforcement actions, including modification of this Order or issuance of additional Orders, and/or performance of additional remedial or removal actions as EPA may deem necessary, or from requiring Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law. Respondents shall be liable, as provided in Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), for the costs of any such additional actions.

D. Notwithstanding any provisions of this Order, the United States retains all of its information gathering, inspection, and enforcement authorities and rights under CERCLA, RCRA, and any other applicable statutes and regulations.

XXVI. CIVIL PENALTIES

A. A willful violation or failure or refusal to comply with any of the terms of this Order shall subject the applicable Respondent or Respondents to a civil penalty of not more than twenty-five thousand dollars ($25,000) for each day in which a violation of this Order occurs or such failure to comply continues, under the provisions of Section 106(b) of CERCLA, 42 U.S.C. § 9606(b). Failure to provide response action under this Order, or

any portion hereof, without sufficient cause, shall also subject the applicable Respondent or Respondents to punitive damages in an amount at least equal to, and not more than, three times the amount of any costs incurred by the United States as a result of such failure to take proper action, under the provisions of Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3).

B. Nothing in this Order shall constitute or be construed as a release from any claim, cause of action, or demand in law or equity against any person, firm, partnership, subsidiary, or corporation for any liability it may have arising out of or relating in any way to the MEW Site.

C. If a court issues an order that invalidates any provision of this Order or finds that a Respondent has sufficient cause not to comply with one or more provisions of this Order, Respondents shall remain bound to comply with all provisions of this Order not invalidated by the court's order.

XXVII. ADMINISTRATIVE RECORD

Upon EPA's request, the applicable Respondent or Respondents shall submit to EPA all documents related to the selection of the response action for possible inclusion in the administrative record.

XXVIII. EFFECTIVE DATE AND COMPUTATION OF TIME

This Order shall be effective thirty (30) days after this Order is signed by the Director of the Hazardous Waste Management Division, EPA Region IX. Unless

otherwise specified in this Order, all times for performance of ordered activities shall be calculated from this effective date.

XXIX. SECTION HEADINGS

The section headings set forth in this Order and its Table of Contents are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Order.

XXX. OPPORTUNITY TO CONFER

Respondents may, within the thirty (30) day period prior to the effective date of this Order, request a conference with EPA Region IX's RPM and Assistant Regional Counsel to discuss the provisions of this Order. If requested, the conference shall occur no later than five (5) days after the effective date of this Order. The purpose and scope of the conference shall be limited to issues involving the implementation of the response actions required by this Order and the extent to which Respondents intend to comply with this Order. This conference is not an evidentiary hearing, and does not constitute a proceeding to challenge this Order. It does not give Respondents a right to seek review of this Order, or to seek resolution of potential liability, and no official stenographic record of the conference will be made. At any conference held pursuant to such a request, Respondents may appear in person, by an attorney, or by other representative. Requests for a conference must be by telephone followed by written confirmation mailed that day to EPA's Assistant Regional Counsel.

XXXI. TERMINATION AND SATISFACTION

Within thirty (30) days after Respondents conclude that the Work required by this Order has been fully performed, Respondents shall so notify EPA and schedule and conduct an inspection to be attended by Respondents and EPA. The inspection shall be followed by a written report submitted by Respondents within thirty (30) days of the inspection by a registered professional engineer and Respondents' Project Coordinator certifying that the Work has been completed in full satisfaction of the requirements of this Order. If, after completion of the inspection and receipt and review of the written report, EPA determines that the Work or any portion thereof has not been completed in accordance with this Order, EPA shall notify Respondents in writing of the activities that must be undertaken to complete the Work and shall set forth in the notice a schedule for performance of such activities. Respondents shall perform all activities described in the notice in accordance with the specifications and schedules established therein. Nothing in this Section XXXI (Termination and Satisfaction) shall limit EPA's right to perform periodic reviews pursuant to Section 121(c) of CERCLA, 42 U.S.C. § 9621(c), or to take or require any action that in the judgment of EPA is appropriate at the MEW Site, in accordance with Sections 104, 106, or 107 of CERCLA, 42 U.S.C. §§ 9604, 9606, or 9607.

IT IS SO ORDERED on this 29th day of November, 1990.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

BY: 

Jeff Zelikson
Director, Hazardous Waste Management Division
U.S. Environmental Protection Agency, Region IX